



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

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Executive Secretary

November 13, 1997

Mr. Bob Dunne
Project Manager
Kennecott Tailings Modernization
P.O. Box 352
Bingham Canyon, Utah 84006-0352

Dear Mr. Dunne:

Subject: Review of Final Closure Plan; Kennecott Tailings Impoundment; Ground Water Discharge Permit UGW350011

My review of the final closure plan for the KUC Tailings Impoundment that was submitted on September 4, 1997 has been completed. The revised submittal is a much more comprehensive document than the previous version and addresses the issues we discussed in our meeting on Feb. 12, 1997. There are just a few minor issues that will need to be cleared up prior to final approval. The issues are as follows:

1. Table 7 lists CLC452 as a surface monitoring point for post closure monitoring. Plate 8 (Post Closure Compliance Monitoring Points) should show this monitoring point.
2. Plate 8 shows monitoring point TLS1434 as a tailings well and monitoring point TLT887 as a seep monitoring point. The symbols for these two sites appear to be switched on this plate.
3. The monitoring points proposed for post closure monitoring should include the toe collection ditch site TLP1469.
4. Figure 5 (Compliance/Contingency Decision Schematic) is a flow chart for steps of action to be followed if a noncompliance event occurs. This figure depicts use of a risk assessment to evaluate the need for corrective action if noncompliance with permit limits is experienced. This approach is not consistent with the Ground Water Quality Protection regulations. A risk assessment may be performed as part of an appeal for alternate corrective action concentration limits after a noncompliance event has progressed into the corrective action requirements of the regulations. Alternate Corrective Action Concentrations Limits must be



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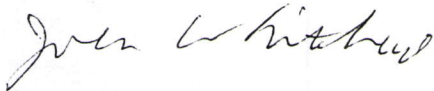
approved by the Board of Water Quality. Figure 5 should either be removed or modified to reflect the Ground Water Quality Protection regulations.

5. Plate 5 shows post closure drainage for the impoundment. The flow direction for the clarification canal on the southeast corner is shown in the opposite direction of flow currently in the canal. How will a reversal in flow direction be accomplished for post closure operations?

In addition on page 11 of the closure plan, reference is made to a sampling program of tailings to assess acid generating potential. The actual number of samples to be taken for reclamation purposes is an issue that is within the purview of the Division of Oil Gas and Mining. DWQ approval of this closure plan will not in any way bind the Division of Oil Gas and Mining to a specific number of samples for assessment of suitability of tailings materials for reclamation.

Your response to the five numbered items noted above within the next 30 days should complete the closure plan. Please make your responses in a form that can be incorporated into the plan. Thank you for your cooperation in this matter. Please feel free to contact me if you should have any questions.

Sincerely,



John Whitehead, Ground Water Hydrologist
Ground Water Protection Section

JW:jw/fb

cc: Wayne Hedberg, DOGM
Terry Sadler, Salt Lake County Health

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